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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/664,154	09/17/2003	Wolfgang Strache	202-085	4177

7590

11/16/2005

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EXAMINER
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MAKI, STEVEN D

ART UNIT	PAPER NUMBER
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1733

DATE MAILED: 11/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/664,154	<b>Applicant(s)</b> STRACHE ET AL.	
	<b>Examiner</b> Steven D. Maki	<b>Art Unit</b> 1733	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 13 October 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) 6-16 and 18 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>020404.091703</u> . | 6) <input type="checkbox"/> Other: _____  |

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1) Claim 17 is objected to because of the following informalities: In claim 17,

"disposed is" should be --disposed in--. Appropriate correction is required.

2) The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "13" has been used to designate both legs (figure 6) and mushroom end (figure 8). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

3) The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: 17. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

4) The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section

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351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5) The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Koch et al 192

6) **Claims 1, 2, 4 and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Koch et al 192 (US 6082192).**

The claimed transponder reads on the electronic monitoring device 12. The claimed substrate reads on encapsulation layer 22. The claimed "soft" connecting structure / cushion support / foam reads on foam 26. Claim 17 does not require connection.

Hahn et al

7) **Claims 1-3 and 17 are rejected under 35 U.S.C. 102(e) as being anticipated by Hahn et al (US 2004/0140030).**

Applicant cannot rely upon the foreign priority papers to overcome this rejection because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

See figure 4, figure 4A, paragraphs 50 and 59. The claimed "soft" connecting structure reads on the RTV polysiloxane bonding adhesive, which when cured has a shore A hardness of 30-40.

Japan 741

**8) Claims 1-3 are rejected under 35 U.S.C. 102(a), (b) as being anticipated by Japan 741 (JP 2001-308741).**

Japan 741 discloses a transponder for a tire comprising an upper sheet of silicone resin, a silicone resin layer 3 in which an antenna coil 1 and electronic circuitry 2 (transponder chip) is embedded and a lower sheet 4 of silicone resin. See figure 1. The silicone resin may have a JIS A hardness of 55. See paragraph 12 of machine translation. The transponder is excellent in thermal resistance and shock resistance.

As to claims 1-3, the claimed transponder arrangement is anticipated by Japan 741's transponder. The claimed substrate reads on at least silicone resin layer 3. The transponder chip and antenna read on the electronic circuitry 2 and antenna coil 1. The claimed "soft" connecting structure reads on either the upper or lower sheet of silicone resin which is relatively soft since it may have a JIS A hardness of 55.

**9) Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japan 741 in view of Pappas et al (US 4319220).**

As to claims 4 and 5, it would have been obvious to provide the sheets 4, 5 of Japan 741's transponder such that they comprise silicone rubber foam since (1) Japan 741 suggests using silicone resin for the sheets 4, 5 so that the transponder has thermal and shock resistance and (2) Pappas et al, also directed to tire monitoring, suggests using silicone rubber foam (col. 9 lines 49-58) to prevent damage due to bending, tension, etc.

Japan 517

**10) Claims 1-2 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japan 517 (JP 9-136517) in view of Koch et al 065 (US 5500065).**

Japan 517 discloses a transponder 1 comprising a transponder body 1A and an attachment part 1B. The transponder body comprises a chip and an antenna (electronic circuitry and an aerial wire printed on a ceramic substrate). The attachment part 1B is an elastic member. The transponder 1 is bonded to the tire at for example the inner surface of a sidewall of the tire (figure 5).

Japan 517, directed to tire monitoring, does not specifically recite the transponder as comprising a transponder chip and antenna embedded in a substrate. However, it would have been obvious to use a transponder chip and antenna embedded in a substrate as Japan 517's transponder 1 since Koch et al, also directed to tire monitoring, suggests encasing / encapsulating a monitoring device (transponder) comprising a microchip and antenna in material such as hard rubber to inhibit straining of the device.

The claimed "soft" connecting structure / cushion support reads on the elastic attachment part 1B disclosed by Japan 517. In paragraph 81 of the machine translation, Japan 517 teaches that the elastic member absorbs / eases impact so that effect on the transponder is avoided. Also, "soft" is a relative term not defining a hardness different from that suggested by Japan 517.

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11) **Claims 3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japan 517 in view of Koch et al 065 as applied above and further in view of Kobe et al (US 5643648) and optionally further in view of Pappas et al or Dominak et al (US 2004/0182494).**

As to claims 3-5, it would have been obvious to one of ordinary skill in the art to use foam for the elastic member of Japan 517 since (1) Japan 517, directed to tire monitoring, teaches bonding the **elastic member** having the transponder on one side thereof to the inner surface of a tire, (2) Kobe et al, also directed to the tire art, teaches **elastic material** suitable for bonding to a tire component (tire inner tube) includes foam (col. 5 lines 25-32) and optionally (3) Pappas et al's suggestion to use silicone rubber foam (col. 9 lines 49-58) to prevent damage due to bending, tension, etc for an antenna used in tire monitoring or Dominak et al's suggestion that foam may be used for monitoring a tag for tire monitoring. As to claim 3, note Japan 517's teaching to use adhesive to bond the elastic member to the tire and Kobe et al's teaching to use silicone adhesive to bond an elastic patch to a tire inner tube. As to claim 5, Kobe et al suggests using foam as elastic material and foamed rubber is taken as well known per se in the tire art. Alternatively and with respect to claims 3 and 5, note Pappas et al's suggestion to use foam silicone rubber. In claim 5, "cellular rubber" reads on foamed rubber.

#### Remarks

12) Applicant's election of species A of figures 1 and 2 claims 1-5 and 17 in the reply filed on 10-13-05 is acknowledged. Because applicant did not distinctly and specifically

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point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

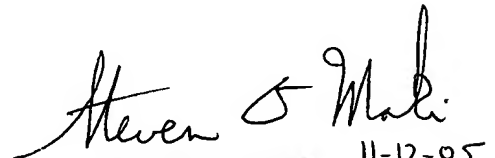
13) No claim is allowed.

14) Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven D. Maki whose telephone number is (571) 272-1221. The examiner can normally be reached on Mon. - Fri. 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Dunn can be reached on (571) 272-1171. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Steven D. Maki  
November 12, 2005

  
**STEVEN D. MAKI**  
**PRIMARY EXAMINER** 11-12-05